Internship Application
Organized by the Student Committee of the Maryland Water Monitoring Council

Project: Developing datalayers for the Maryland Water Monitoring Council (MWMC) Water Quality Monitoring Site Mapper

Description: We are looking for a student to assist us with developing new datalayers for our Maryland Water Monitoring Council (MWMC) Water Quality Monitoring Site Mapper http://dnr.maryland.gov/streams/Pages/MWMC/mapper.aspx, a mapping tool which allows you to see various types (State, federal, local agencies, private companies and citizen groups) of water monitoring locations in Maryland. If chosen, the student would help develop, gather, compile, and coordinate data with local Maryland monitoring/environmental groups to keep the existing datalayers current and to develop new datalayers to expand the use of the tool. The updated datalayers would become a permanent part of the mapping tool and would be presented at an upcoming MWMC event or board meeting. The student would work closely with the Information Management and Communication Committee to develop a new datalayer that will focus on the coverage provided by the existing citizen monitoring groups within Maryland. This would include researching active monitoring groups, confirming the watersheds that are actively monitored, and developing a GIS layer to display this information.

Founded in 1994, the MWMC serves as a statewide collaborative body encouraging effective collection, interpretation, and dissemination of environmental data. The MWMC strives to improve communication within the Maryland water monitoring and management community regarding issues, policies, and resource management. The Council is aligned under the Maryland Department of Natural Resources (MDNR) with a Board of Directors having representatives from local, state and federal agencies, private industry, academia, and citizen and regional organizations.

Travel: The student will report to the MDNR office in Annapolis or Maryland Department of Transportation (MDOT) office in Hanover at the start of the project and intermittently. The student will be able to work remotely. The student may choose to travel to various monitoring program offices to work with monitoring groups, but this is not required.

Time Commitment: The chosen student will work approximately 8 hours per week or 120 hours to complete the project. Student will be required to travel at beginning of project to meet with MWMC representatives to layout and define specific project components. After initial meetings, the student will be expected to check in weekly to discuss progress, set new tasks and resolve any issues. A data presentation at an upcoming MWMC event or board meeting will be required.

Support: The student will be working on a volunteer basis and may be able to get academic credit through their university.

Supervisor: The chosen student will work with MWMC representatives from MDOT (Sandy Hertz), MDNR (Tom Parham), University of Maryland Center for Environmental Science (Caroline Donovan).

Eligibility and skills
- The student should be a declared major in a Geosciences or Environmental program and have at least 3 credits of geospatial technology.
- The student is expected to be proficient with ArcGIS and Microsoft Office

- The student should have access to ArcGIS and Microsoft Office.
- The student will gain experience in the following:
  - Development of GIS layers in team environment
  - Real-world GIS application development
  - Developing GIS contacts in State and Federal government

Application Process
- Please provide a short cover letter, resume, and an unofficial transcript (to verify student status) to:

    Sandy Hertz
    MDOT TSO, Office of Environment
    7201 Corporate Center Drive
    Hanover, MD 21076
    Phone: (410) 865-2780
    Email: shertz@mdot.state.md.us
- Applications are due by Monday, October 30 at 5:00 pm.
- The selection process is expected to take one week.